

REPLY UNDER 37 C.F.R. § 1.116 – EXPEDITED PROCEDURE – TECHNOLOGY CENTER 3683

REMARKS

This is a full and timely response to the final Office Action mailed July 16, 2003 (Paper No. 7). Reexamination and reconsideration in light of the foregoing amendments and following remarks is respectfully solicited.

Claims 5, 7-10, and 12-14 are now pending in the application, with Claims 5 and 10 being the independent claims. Claims 6 and 11 have been canceled herein. No new matter is believed to have been added.

Claim Objections

Claims 6 and 11 were objected to as allegedly not further limiting the independent claim from which each depends. While not conceding the correctness of the objections, Applicants have canceled Claims 6 and 11 in an effort to advance prosecution.

Rejections Under 35 U.S.C. 102(b)

Claims 5-7 and 10-12 were rejected under 35 U.S.C. § 102 (b) as allegedly being anticipated by U.S. Patent No. 6,315,094 (Griffin et al.). This rejection is respectfully traversed.

Independent Claim 5 relates to a tuned mass damper that includes a mass having predetermined inertia properties, and a plurality of isolators arranged in a hexapod configuration that are coupled to the mass and adapted to couple to a structure that may experience vibrations in six degrees of freedom, and recites, *inter alia*, wherein each of the isolators, in combination with the mass, is individually tuned to reduce the vibrations experienced by the structure.

Independent Claim 10 relates to a system that includes a structure that experiences vibrations in six degrees of freedom and a tuned mass damper. The tuned mass damper includes a mass having predetermined inertia properties, and a plurality of isolators arranged in a hexapod configuration that are coupled to the mass and adapted to couple to a structure that may experience vibrations in six degrees of freedom, and independent Claim 10 also recites, *inter alia*, wherein each of the isolators, in combination with the mass, is individually tuned to reduce the vibrations experienced by the structure.

Griffin et al. relates to a passive skyhook-type vibration isolation system, and discloses use of a hexapod type suspension for a secondary mass, which is in turn coupled to a primary mass that is suspended by a primary suspension. Although Griffin et al. does disclose tuning of

REPLY UNDER 37 C.F.R. § 1.116 – EXPEDITED PROCEDURE – TECHNOLOGY CENTER 3683

the secondary system, it does not disclose at least the above noted feature of independent Claims 5 and 10. Namely, Griffin et al. fails to disclose (or even remotely suggest) that each of the isolators, in combination with the mass, is individually tuned to reduce the vibrations experienced by the structure, as recited in independent Claims 5 and 10. Rather, Griffin et al. discloses that the entire secondary suspension is tuned to the primary mass's resonant frequency (col. 8, ll. 21-22).

As emphasized above, what the present invention encompasses is a plurality of isolators, wherein each of the isolators, in combination with the mass, is individually tuned to reduce the vibrations experienced by a structure. The capability of individually tune each isolator, in combination with the mass, provides the great benefit of being able to more finely tune a system that experiences vibration. The Office Action fails to point out where Griffin et al. discloses the capability of individually tuning each isolator in combination with the mass. Moreover, Applicants submit that such a disclosure is not inherent in Griffin et al.

In view of the above, Applicants respectfully solicit reconsideration and withdrawal of the § 102(b) rejection.

Rejections Under 35 U.S.C. § 103

Claims 8 and 13 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over U.S. Patent No. 5,305,981 (Cunningham et al.), and Claims 9 and 14 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Griffin et al., and U.S. Patent No. 6,022,005 (Gran et al.). These rejections are respectfully traversed.

It is submitted that neither Cunningham et al. nor Gran et al. make up for at least the above-noted deficiency of independent Claims 5 and 10, from which Claims 8, 9, 13, and 14 depend. Namely, both Cunningham et al. and Gran et al. fail to disclose or suggest at least that each of the isolators, in combination with the mass, is individually tuned to reduce the vibrations experienced by the structure, as recited in independent Claims 5 and 10.

In view of the foregoing, reconsideration and withdrawal of each of the § 103 rejections is respectfully requested.

REPLY UNDER 37 C.F.R. § 1.116 – EXPEDITED PROCEDURE – TECHNOLOGY CENTER 3683

Conclusion

Based on the above, independent Claims 5 and 10 are patentable over the citations of record. The dependent claims are also submitted to be patentable for the reasons given above with respect to the independent claims and because each recite features which are patentable in its own right. Individual consideration of the dependent claims is respectfully solicited.

The other art of record is also not understood to disclose or suggest the inventive concept of the present invention as defined by the claims.

This Amendment was not earlier presented because Applicants earnestly believed the prior Amendment placed the subject application in condition for allowance. Accordingly, entry of this Amendment Pursuant to 37 C.F.R. § 1.116 is respectfully requested.

Moreover, entry and consideration of this Amendment are proper under 37 C.F.R. § 1.116 for at least the following reasons. The present Amendment places the application in better form for appeal, which Applicants fully intend to pursue if necessary. The present Amendment does not raise new issues requiring further search or consideration. Therefore, entry and consideration of the present Amendment are proper under 37 C.F.R. § 1.116 and are hereby requested.

Hence, Applicants submit that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

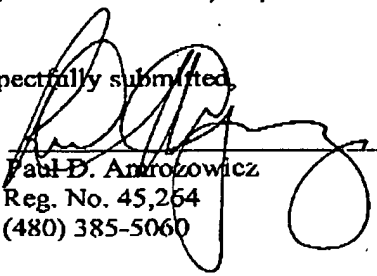
If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

If for some reason Applicant has not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Dated: September 16, 2003

Ingrassia Fisher & Lorenz
Customer No. 29906

Respectfully submitted,

By: 
Paul D. Antrozowicz
Reg. No. 45,264
(480) 385-5060

OFFICIAL

RECEIVED
CENTRAL FAX CENTER

SEP 16 2003